

Overview

Microsoft Teams is a hub for teamwork in Office 365. Keep all your team's chats, meetings, files, and apps together in one place. Software development teams get instant access to everything they need in a dedicated hub for teamwork, that brings your teams, conversations, content and tools from across Office 365 and Azure DevOps together into one place.

Note: This topic applies to Azure DevOps Services and to TFS 2017.2 and later versions.

Prerequisites

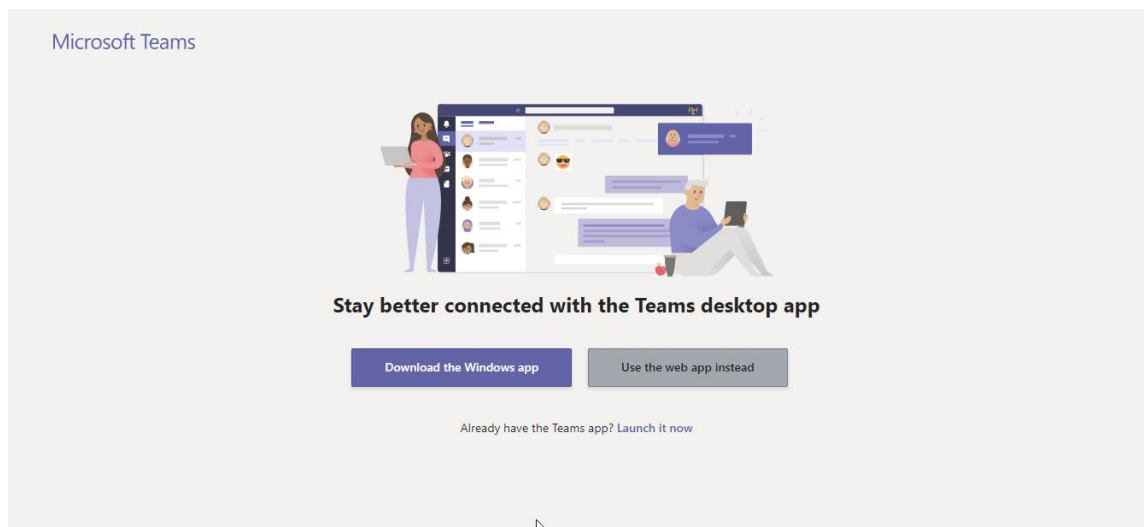
1. You should have Office365 account in order to integrate **Azure DevOps Services** with **Microsoft Teams**.
2. Only Azure DevOps organizations in the same organization (AAD tenant) can be used to integrate with your Microsoft Teams account.

You can start a free trial if you don't have Office365 account from [here](#)

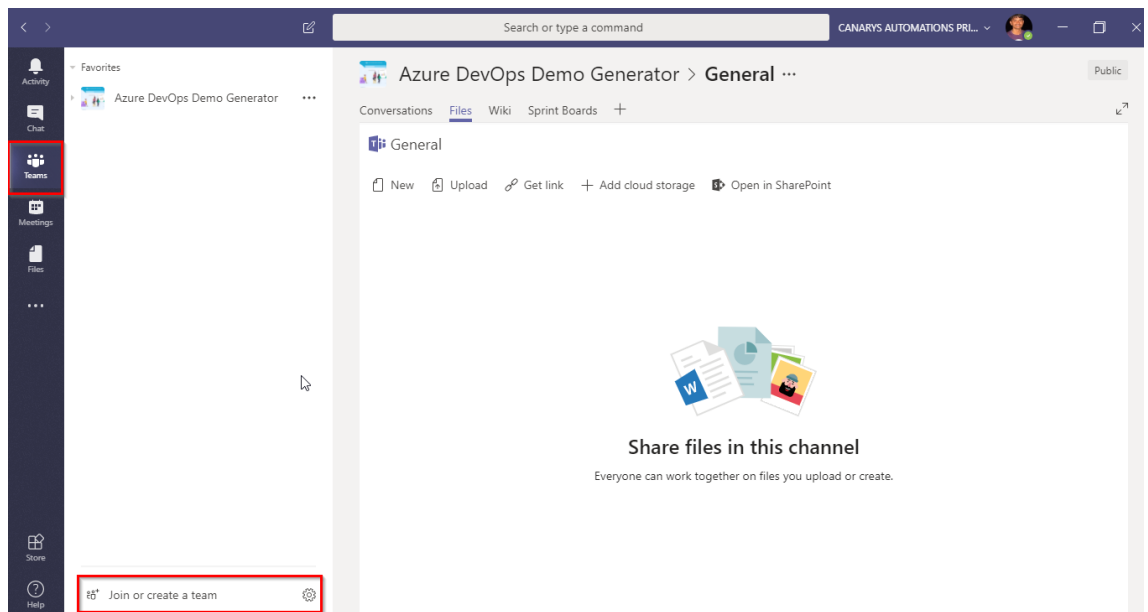
In this lab, you'll learn about how **Azure DevOps** integrates with **Microsoft Teams** to provide a comprehensive chat and collaboration experience, across your Agile and development work.

Getting started with Microsoft Teams

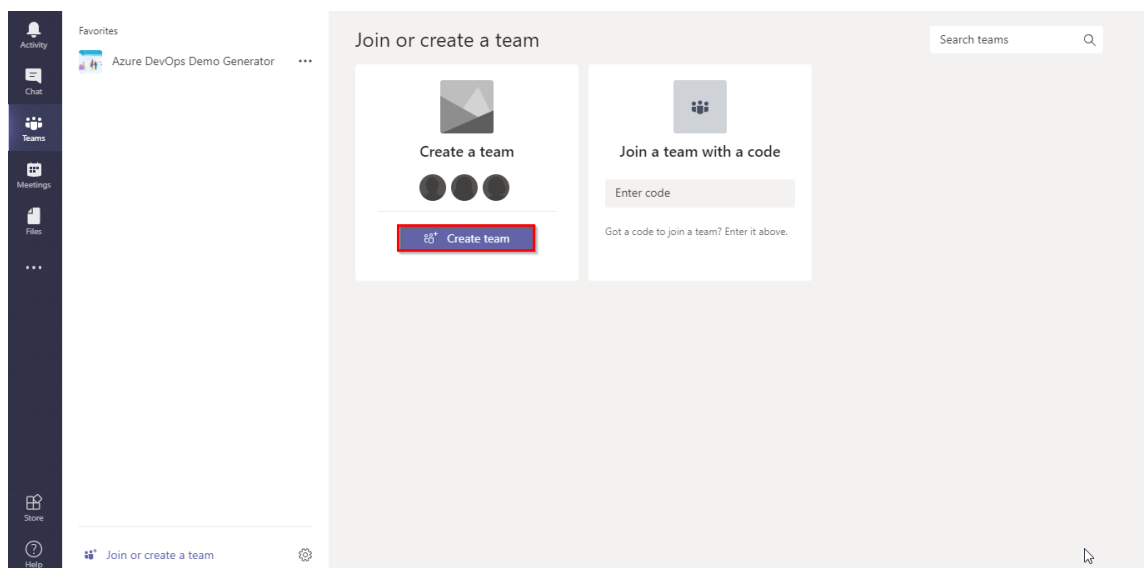
1. Launch **Microsoft Teams** - you can either open the web app or download the app to your desktop from [here](#)



2. After launching the app, on the left side of **Teams**, click **Teams**, and then at the bottom of the teams list, click **Join or create a team**. A team is a collection of people who gather together around a common goal.



3. In the **Join or create team** window select **Create team**.



4. Give a name for your team and description if needed. Select the privacy settings and click on **Next**.

Create your team

Collaborate closely with a group of people inside your organization based on project, initiative, or common interest. [Watch a quick overview](#)

Team name

Tailwind Traders



Description

Tailwind Traders

Privacy

Private - Only team owners can add members



Private - Only team owners can add members

Public - Anyone in your organization can join

Cancel

Next

5. Add members for your team in order to get notified the events that occur and also start conversations with your team members.

Add members to Tailwind Traders

Start typing a name, distribution list, or mail enabled security group to add to your team.

Search x

Add

AH

Member

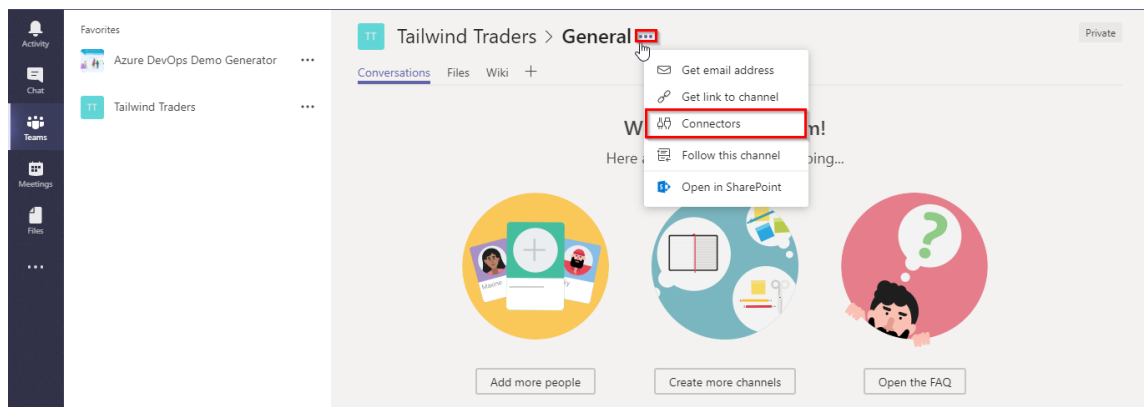
Member v x

Close

Integrating Microsoft Teams with Azure DevOps Services

Azure DevOps Services integration with Microsoft Teams provides a comprehensive chat and collaborative experience across the development cycle. Teams can easily stay informed of important activities in your Azure DevOps team projects with notifications and alerts on work items, pull requests, code commits, build and release.

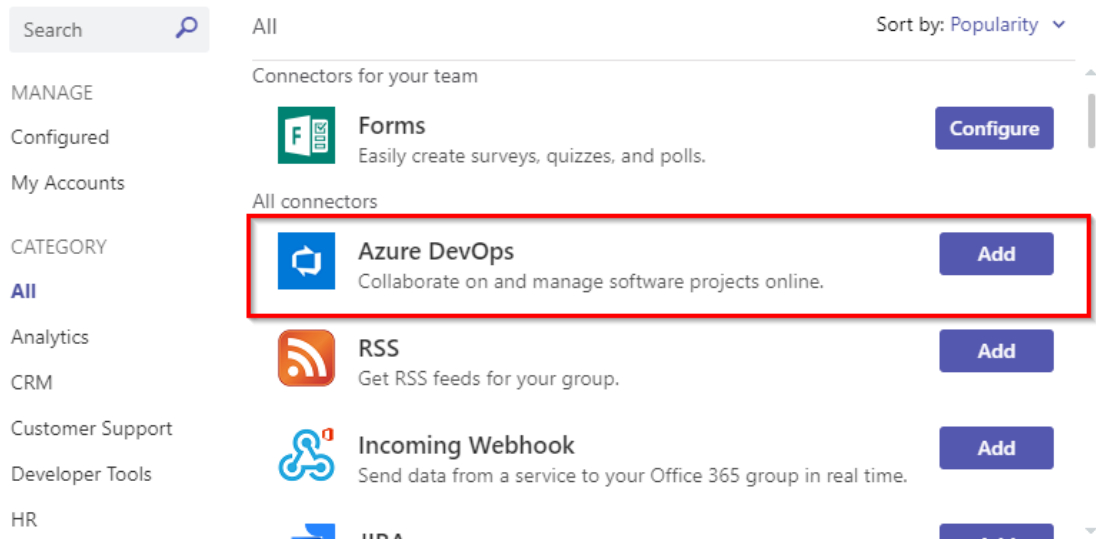
1. Select **Tailwind Traders** team that was created. Click the ellipsis or '...' at the top nav of your team channel, and then select **Connectors**.



2. Select **Azure DevOps** connector from the list and click **Add**.

Connectors for "General" channel in "Tailwind Traders" team

Keep your group current with content and updates from other services.



3. Click **Install** to add the connector for your team.



Azure DevOps

Plan better, code together and ship faster using Azure DevOps.
Search, find work, and collaborate better with your team.



Add for you

Available

▸ View features

Add to a team

Yes



▾ View features



Pin content and services at the top of a channel



Get notifications right in a channel



Include rich content in a conversation

About

▸ View more

Privacy and permissions

▸ By using Azure DevOps, you accept its [privacy policy](#) and [terms of use](#):

Install



4. Select your organization (you may be prompted to sign in first), the project, and your team. Choose the type of activity you want to be notified about. Depending on the event, you may be given further fields to filter down the notifications so you can filter out notifications your team does not care about. For example, for work item events, you can filter by area path, work item type, and even particular field changes.

Connectors for "General" channel in "Tailwind Traders" team



Azure DevOps

[Send feedback](#)

The Azure DevOps connector sends notifications about activities in your projects. If you don't already have an account, create one on the [Azure DevOps](#) website.


Choose the Azure DevOps account you want to use to configure this connector, or add a new account.

Sriramdas Balaji |  ▼

[Add a new Azure DevOps account](#)

Organization

Choose the organization to list the projects under

 ▼

Project

Choose the project that you want to receive notifications for

Tailwind Traders ▼

Team

Choose the Azure DevOps team that you want to receive notifications for

Tailwind Traders Team ▼

Event Type

Select type of event to receive notifications for

Work item updated ▼

Area path

Choose the Area Path

[Any] ▼

Work item type

Choose the work item type

[Any] ▼

Field

Choose the Field

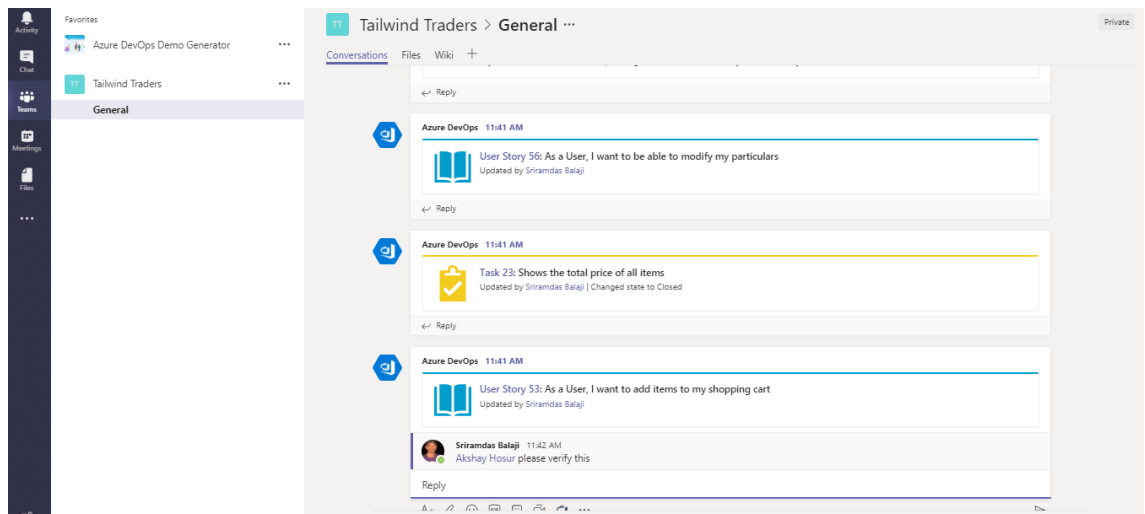
[Any] ▼

Save

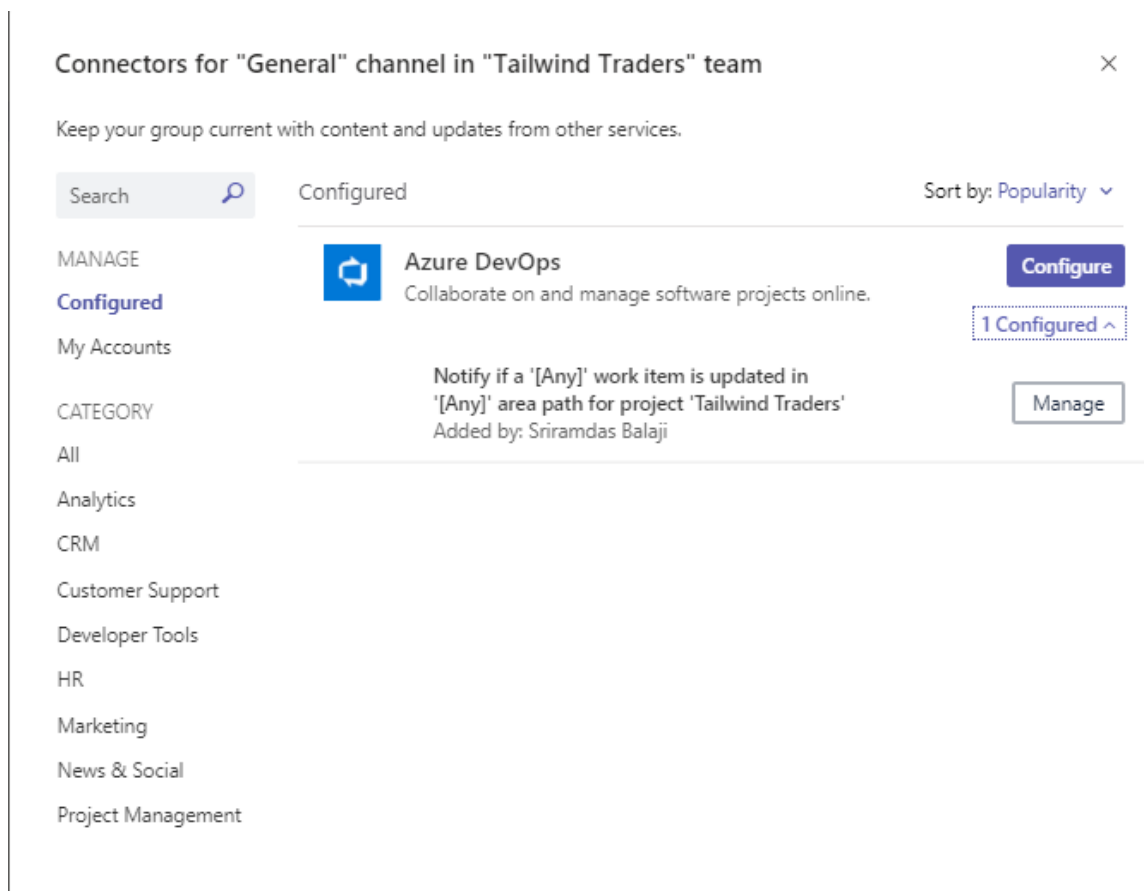
Cancel

When you are happy with the configuration, **Save** it.

5. Since Azure DevOps is configured now, activity from your Azure DevOps Services project will start appearing in your Teams channel.



6. If you want to make a change to an existing connector, navigate to the **Configured** tab on the **Connector** dialog, find the connector, and click **Manage**.

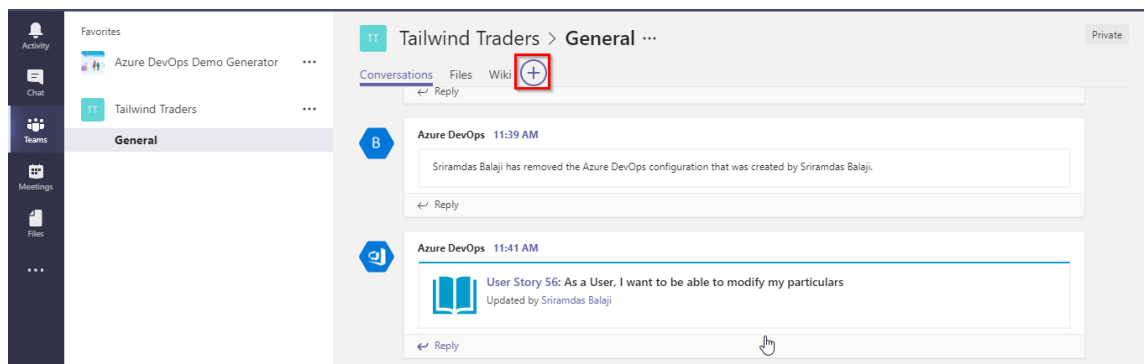


Azure DevOps Kanban board & Dashboards in Teams

Your Kanban board turns your backlog into an interactive signboard, providing a visual flow of work. As work progresses from idea to completion, you update the items on the board. Each column represents a work stage, and each card represents a user story (blue cards) or a bug (red cards) at that stage of work.

You can bring in your teams kanban board or favourite dashboard directly into Microsoft Teams. These can be added using Tabs. **Tabs** allow team members to access your service on a dedicated canvas, within a channel or in user's personal app space. You can leverage your existing web app to create a great tab experience within Teams.

1. To bring your Kanban board or Dashboard into Microsoft Teams, click the **+** icon to add new tab. Find the Azure DevOps icon and select **Azure DevOps**



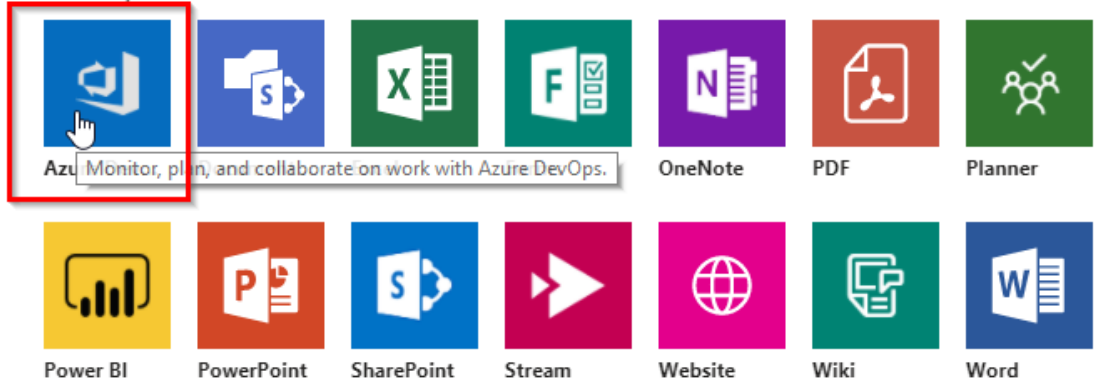
Add a tab



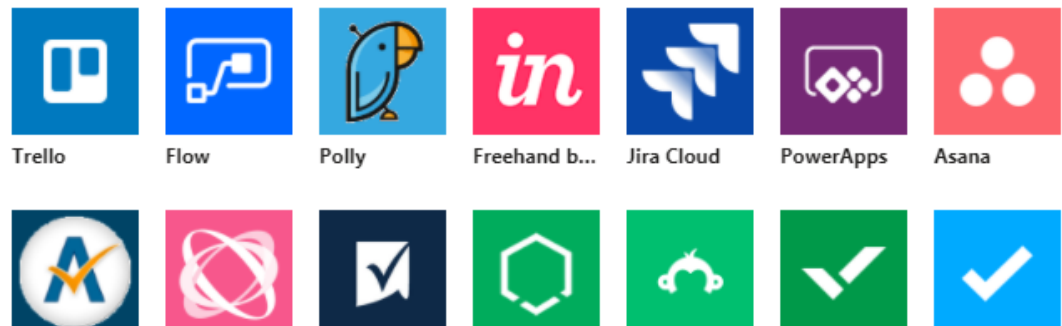
Turn your favorite apps and files into tabs at the top of the channel.



Tabs for your team



All Tabs



2. Select the Organization

Azure DevOps

[About](#) ×



Plan better, code together and ship faster using Azure DevOps. Search, find work, and collaborate better with your team.

[Learn more](#)

You must first select an existing VSTS organization.

Select organization

☒ Post to the channel about this tab

Back

Save

https://azchatopprodCUS1.azuredevops.visualstudio.com

Select the organization that you want to connect with this channel:

Organization

dev.azure.com/ [redacted] ✓

Continue

Note: The Kanban board and Dashboard integration has the following limitations:

1. Only works for Azure DevOps Services (Team Foundation Server is not supported)
 2. Only Kanban boards and Dashboards within organizations in the same organization (Azure Active Directory tenant) as your Microsoft Teams account can be configured.
3. Once you have authenticated and selected your organization, you will be displayed a screen to select a **Kanban board** or **Dashboard**.

Azure DevOps

About ×



Plan better, code together and ship faster using Azure DevOps. Search, find work, and collaborate better with your team.

[Learn more](#)

Connected to account: <https://dev.azure.com/sriramdasbalajicanorg/>

- ☐ Add a Dashboard
- ☒ Add a Kanban board

Kanban boards provides a visual interactive way of tracking progress of work. [Learn more about Kanban boards](#)

Project

Tailwind Traders

Team

Tailwind Traders Team

Backlog Level

Stories

☒ Post to the channel about this tab

Back

Save

Select the **Kanban board** and select your project, team, backlog level. **Save** the configuration.

4. Now you can see the **Kanban Board** appearing in the tab.

The screenshot shows the Azure DevOps interface for the 'Tailwind Traders' project. The 'General' tab is selected, and the 'Tailwind Traders Team Stories' backlog is visible. The Kanban board is displayed with four columns: New, Active (3/5), Resolved (3/5), and Closed. Each column contains several user stories with details like State, Area Path, Priority, and Iteration Path. The 'Active' column is highlighted with a red box in the top navigation bar.

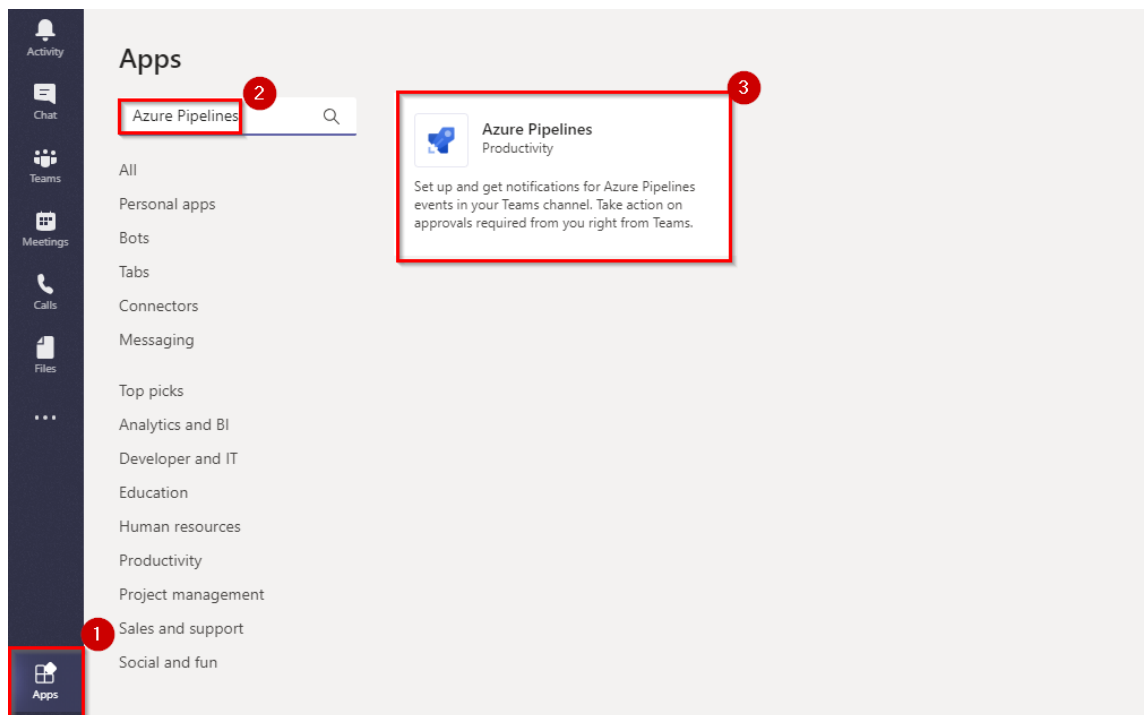
5. All the work can be monitored during the daily standup's and the updates are real when the work items states are changed. It also allows us to customize the Kanban Board from within the Teams and synced.

Azure Pipelines with Microsoft Teams


Azure Pipelines app on Microsoft Teams enables you to monitor the events for your pipelines. You can set up and manage subscriptions for releases, pending approvals, completed builds etc. and get notifications right into your Teams channel for these updates. You can also approve releases from within your Teams channel.

Install Azure Pipelines app to your team

1. Visit the App store in Microsoft Teams and search for the **Azure Pipelines** app. Select **Azure Pipelines** app.



2. In the app, window select your team and click **Install**.




Azure Pipelines

Set up and get notifications for Azure Pipelines events in your Teams channel. Take action on approvals required from y... [See more](#)

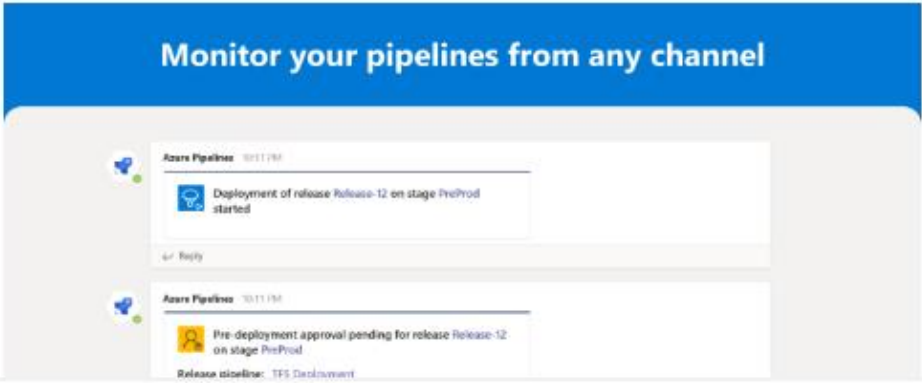
Add to a team

Tailwind Traders

X


 Chat with a bot to ask questions and find info

Screenshots



Install

3. Once the app is installed to your team, select channel and click **Set up**



Azure Pipelines is now available for Tailwind Traders


X

First, pick the channel where you want to use the app

General

▼

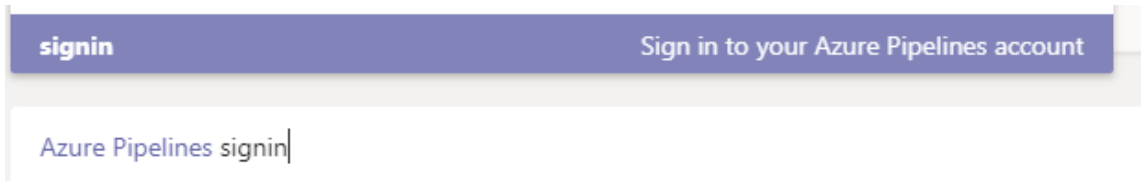
Next, set up the features that you want

 Bot

Chat with a bot to ask questions and find info

Set up

4. Use the `@azure pipelines` handle to start interacting with the app.
5. In Conversations enter `@Azure Pipelines signin`.



6. The app asks you to **Sign in** and authenticate to Azure Pipelines. Click **Sign in** and complete the authentication.



Connect your Azure Pipelines account to use the service in Microsoft Teams.

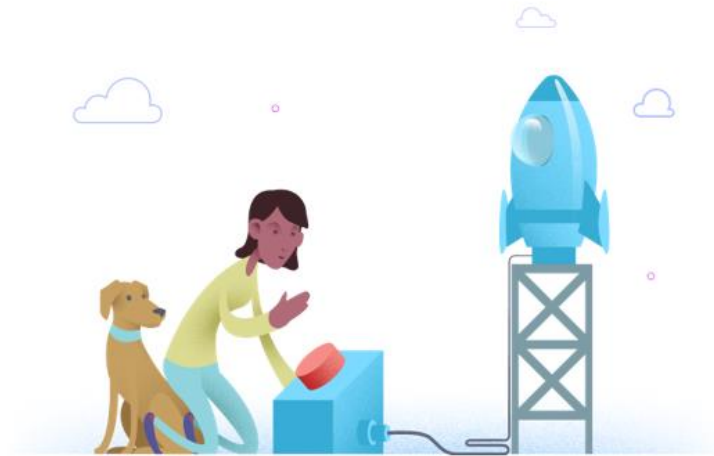


Sign in



Azure Pipelines

Sign in



You've signed in as [redacted] and you can now run any command.
Simply start a message with '**@Azure Pipelines**' to see what you can do.

Close

Subscribe for the pipelines notifications

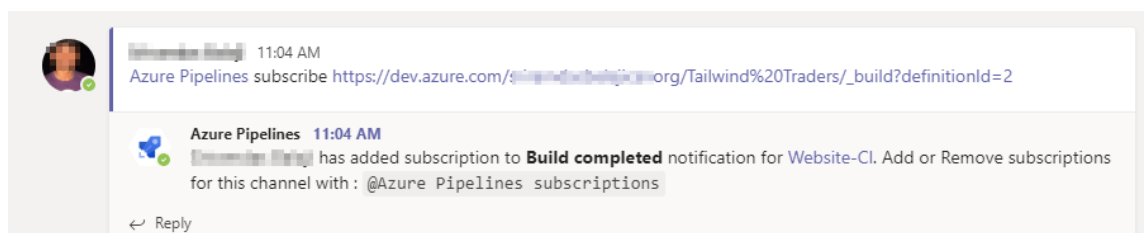
To start monitoring a pipeline, use the following command inside a channel:

```
@azure pipelines subscribe [pipeline url]
```

The pipeline URL can be to any page within your pipeline that has a *definitionId* or *buildId*/*releaseId* present in the URL.

1. For example, to subscribe for Build pipelines enter

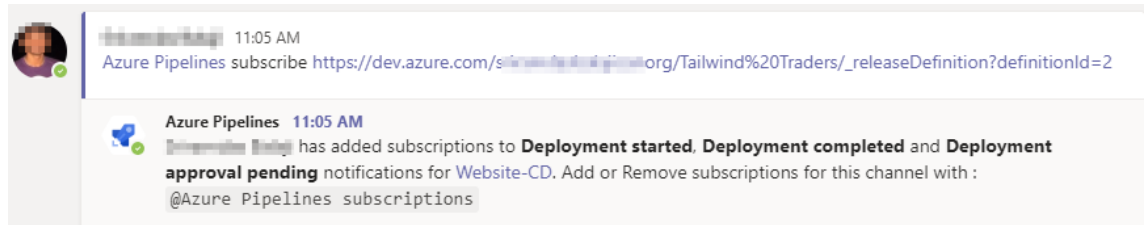
```
@azure pipelines subscribe  
https://dev.azure.com/myorg/Tailwind%20Traders/\_build?definitionId=2
```



For Build pipelines, the channel is subscribed to the Build completed notification

2. To subscribe for Release pipelines enter

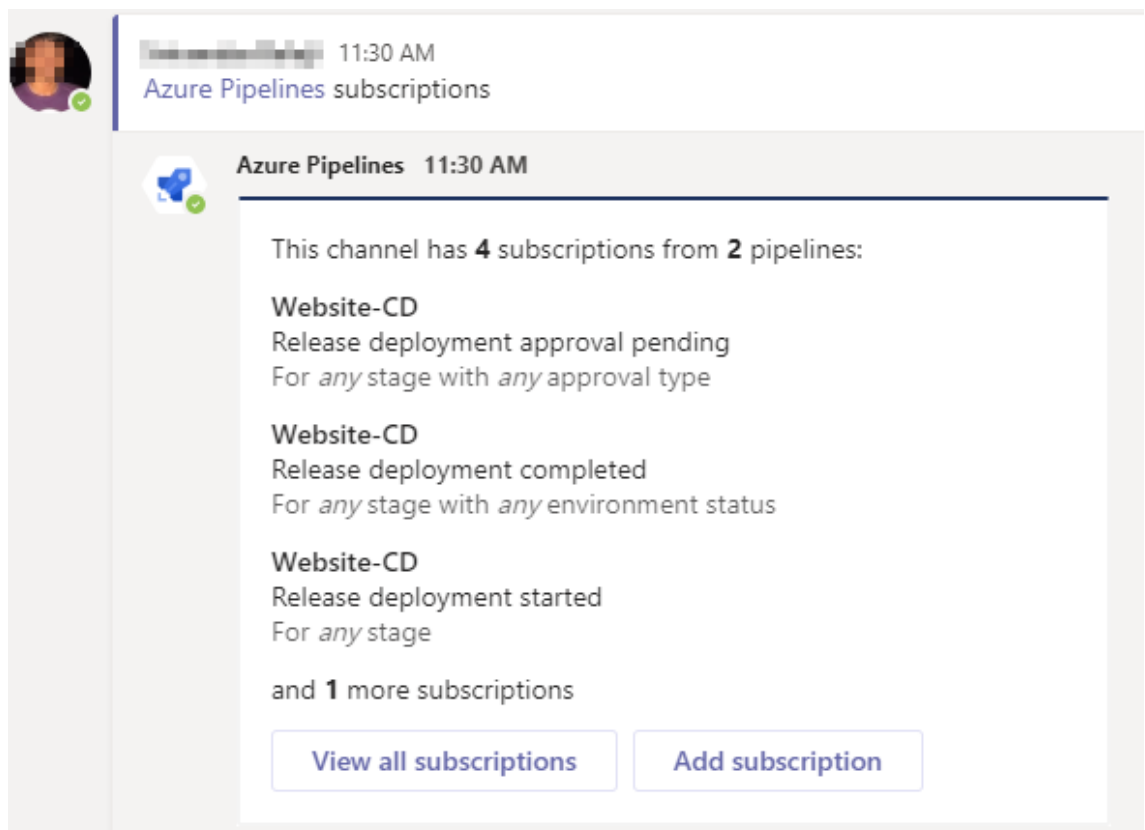
```
@azure pipelines subscribe  
https://dev.azure.com/myorg/Tailwind%20Traders/_releaseDefinition?definitionId=2
```



For Release pipelines, the channel is subscribed to the *Release deployment started*, *Release deployment completed*, and *Release deployment approval pending* notifications.

3. **Managing Subscriptions:** You can add or remove subscriptions by using the following command

`@azure pipelines subscriptions` This command lists all of the current subscriptions for the channel and allows you to add/remove subscriptions.





Azure Pipelines

View subscriptions



This channel has **4** subscriptions from **2** pipelines:

Website-CD

Release deployment approval pending

For *any* stage with *any* approval type

Remove

Website-CD

Release deployment completed

For *any* stage with *any* environment status

Remove

Website-CD

Release deployment started

For *any* stage

Remove

Website-CI

Build completed

For *any* build status


Remove

Add subscription


Using filters to customize subscriptions

When a user subscribes to any pipeline, a few subscriptions are created by default without any filters being applied. Often, users have the need to customize these subscriptions. For example, users may want to get notified only when builds fail or when deployments are pushed to a production environment. The Azure Pipelines app supports filters to customize what you see on your channel.

Run the `@Azure Pipelines subscriptions` command and select **Add Subscription**.



11:30 AM
Azure Pipelines subscriptions



Azure Pipelines 11:30 AM

This channel has **4** subscriptions from **2** pipelines:

Website-CD
Release deployment approval pending
For *any* stage with *any* approval type


Website-CD
Release deployment completed
For *any* stage with *any* environment status

Website-CD
Release deployment started
For *any* stage

and **1** more subscriptions

[View all subscriptions](#)[Add subscription](#)

- **Get notifications only for failed builds**




Azure Pipelines
Add subscription

1

Choose Filters
Build Status
Failed

Submit




Azure Pipelines
Add subscription

2

Choose Event type
Build completed

Next



Azure Pipelines
Add subscription

3

Choose Pipeline
Website-CD

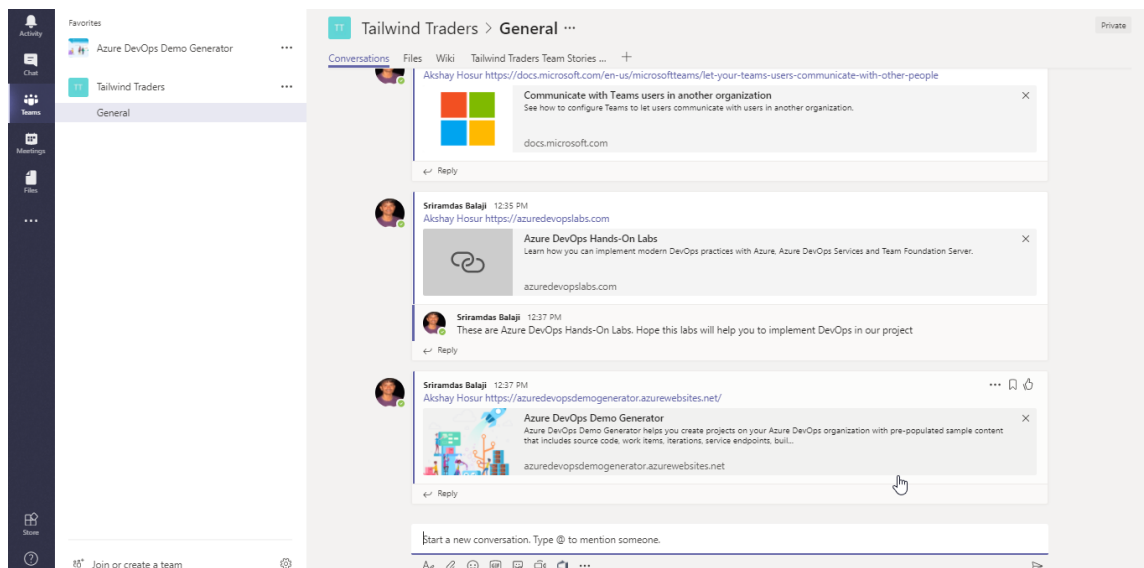
Next

- **Get notifications only if the deployments are pushed to prod environment**

Collaboration Experience

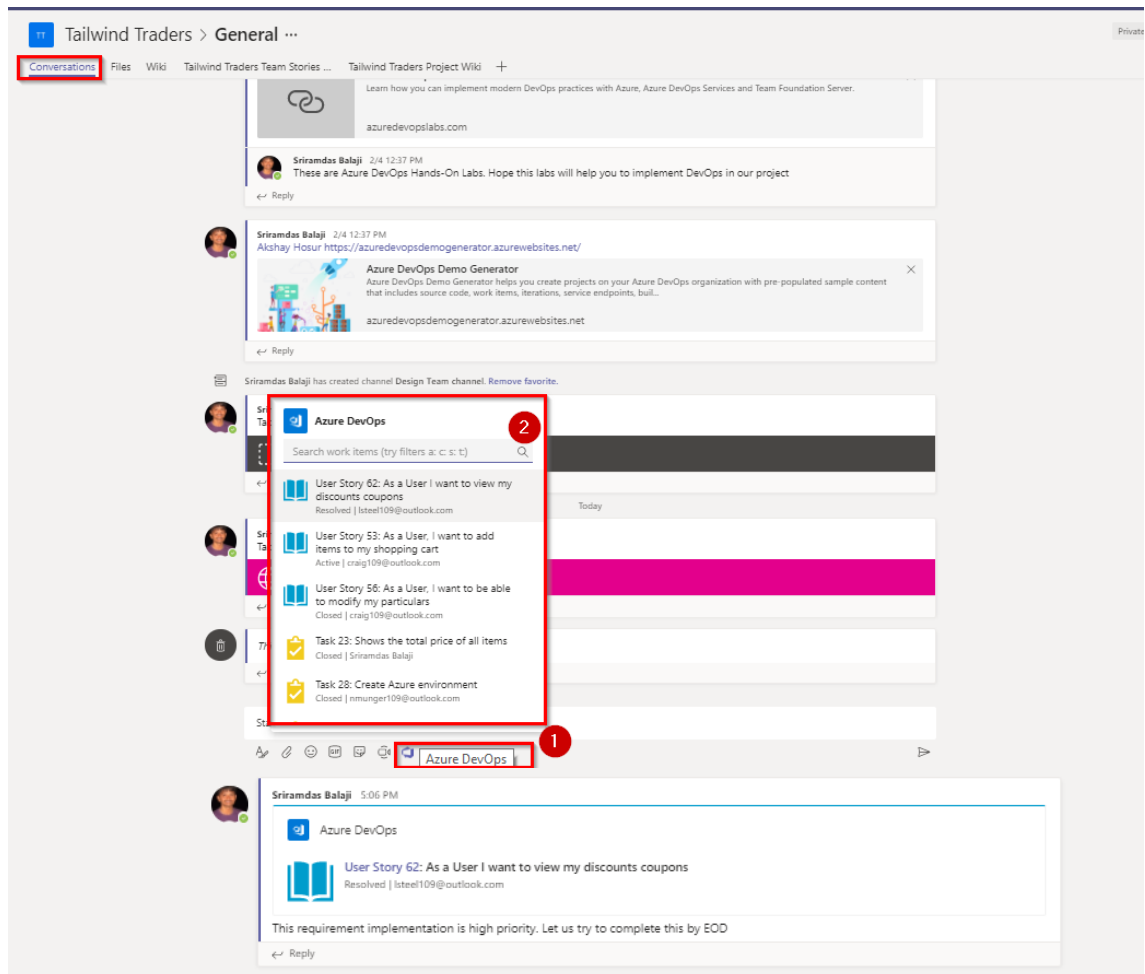
Messages are a good way to connect and keep a history of the conversation. It's even better to use emoji, stickers, and GIFs to make a great impression.

1. Start having conversations with your team members by selecting the **Conversations** tab.



2. All the conversations could be retrieved at any time without losing the history which helps the entire team to have a collaborative experience
3. Teams can have a collaborative experience with the latest updates with respect to the **work items, build summary** etc so that it helps in better transparency
4. **Easily find and discuss work items from DevOps in Teams** : You can easily search, find and discuss work items from Azure DevOps in Teams, keeping the conversation and collaboration within your Teams app. For example if you would like to discuss about any User Story you can click on **Azure DevOps** icon. It will

prompt a window where you can search your project workitems. Select the work item to discuss and enter your comments.



For more information about using the Conversation tab in Microsoft Teams click [here](#)

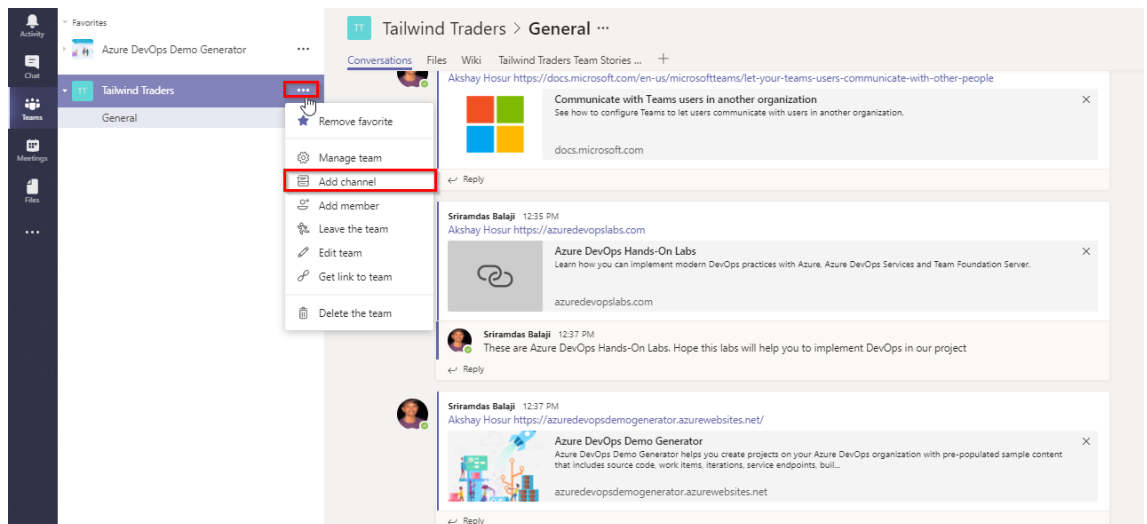
Working with Channels

Channels are dedicated sections within a team to keep conversations organized by specific topics, projects, disciplines—whatever works for your team!

- Team channels are places where everyone on the team can openly have conversations. Private chats are only visible to those people in the chat.
- Channels are most valuable when extended with apps that include tabs, connectors, and bots that increase their value to the members of the team.

To learn more about best practices for creating teams and channels view this short [video](#).

1. Select the **Team** that was created earlier and click on **ellipsis (...)**



2. Give a name and description for your channel and click on **Add**

Create a channel for "Tailwind Traders" team

Channel name

Design Team channel

Description (optional)

Help others find the right channel by providing a description

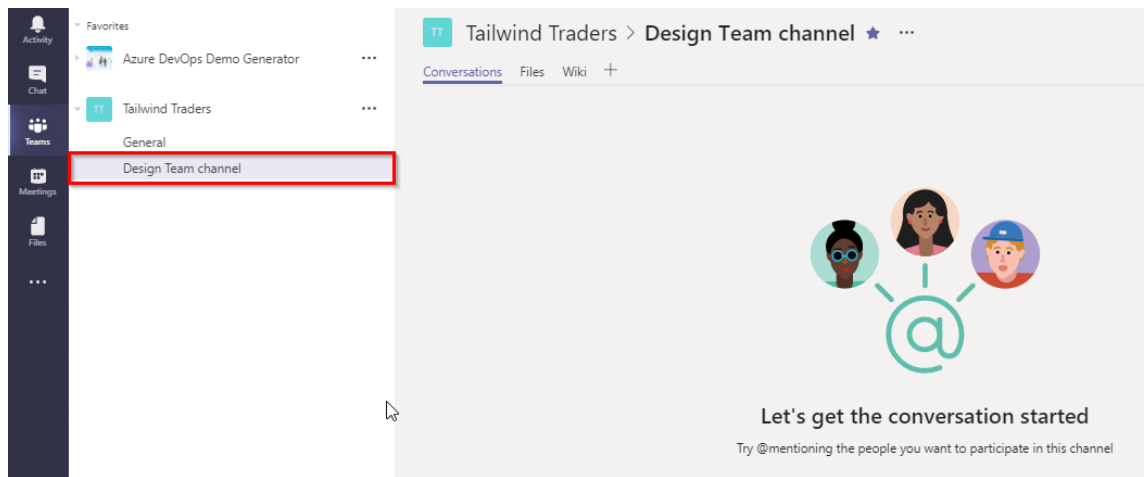
☐ Automatically favorite this channel for the whole team



Cancel

Add

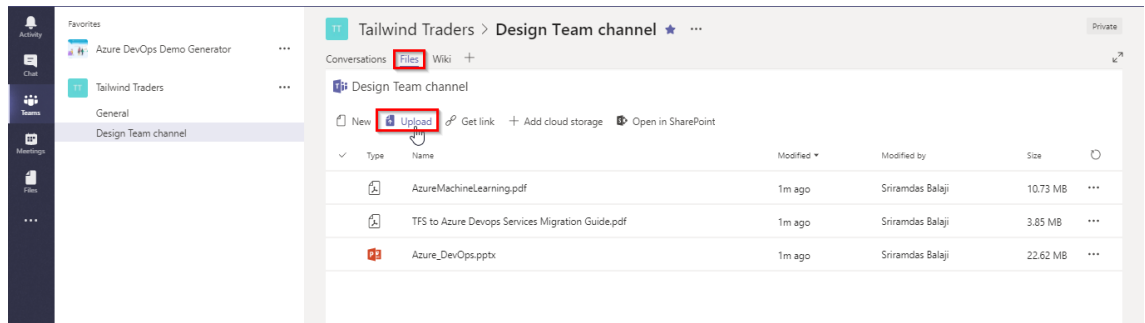
3. Once the channel is created, the conversations can be started among the team members.



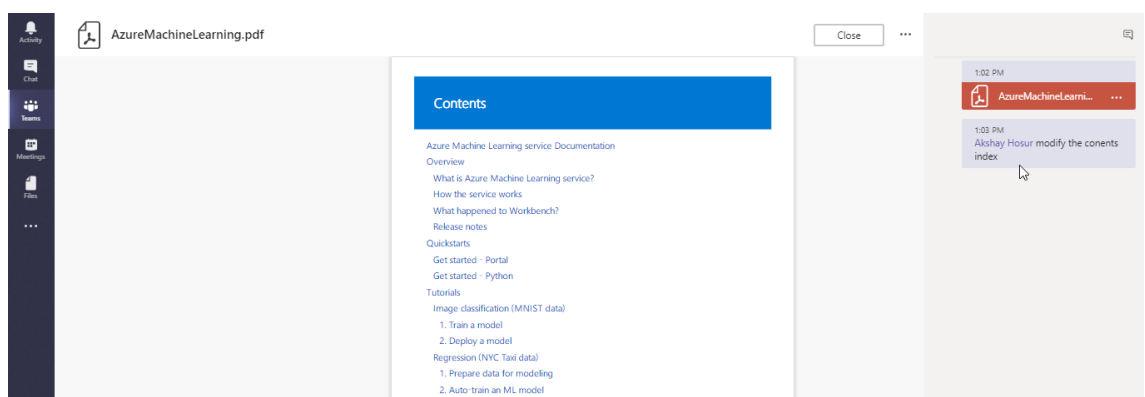
Sharing the Contents

As your team works together you'll undoubtedly have files that you'll want to share and collaborate on. Microsoft Teams makes it easy to share files within channels. If the files are Word, Excel, PowerPoint or Visio files your colleagues can even view, edit, and collaborate on the files right within Teams. For Word, Excel, and PowerPoint, they can see each others changes in almost real time.

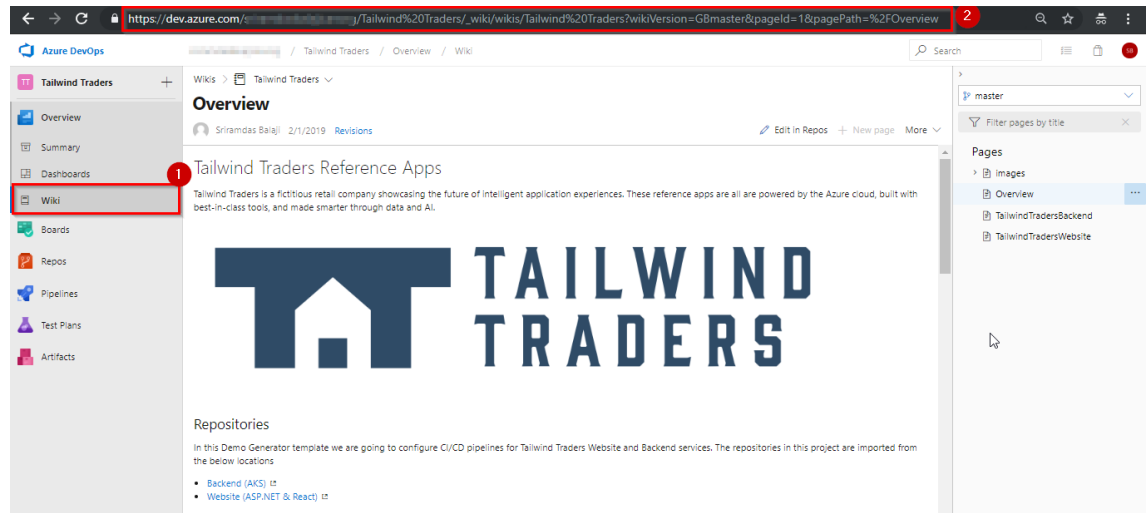
1. Select **Files** and select **Upload** to share a document with the team. You can also use **Drag and drop** (Using your mouse, drag the file from where it's currently located and drop it on the Teams window among the files.) method to upload files.



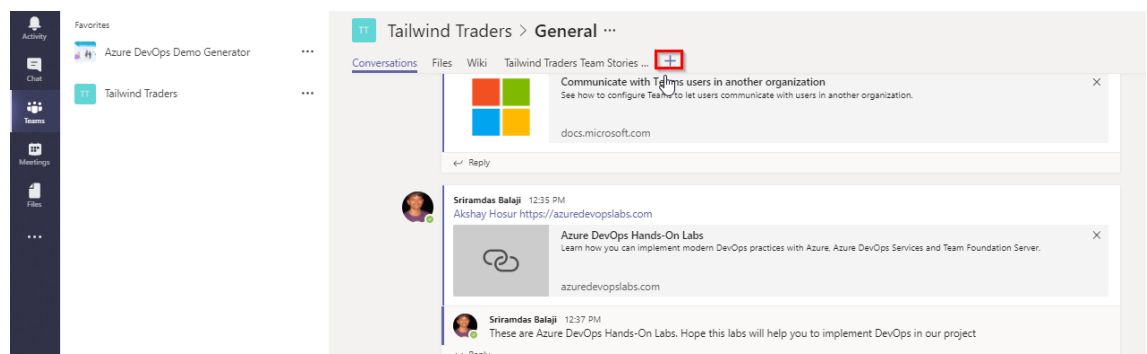
2. Click on the document that was uploaded from the list to start editing and having a live conversation with your team members



3. You can also share the related websites within the Teams as Tabs. As we use **Wiki** to explain project objectives, epics, specs, release notes, best practices or other content to ensure all your team members and stakeholders learn, you can also share your Team's **Wiki** content as website within teams as tab.
4. Navigate to your Azure DevOps projects Wiki page. Copy the URL.



5. Now switch back to the **Teams**. Click on + and select **Website**



Add a tab

Turn your favorite apps and files into tabs at the top of the channel.



Tabs for your team



Azure Dev...



Document ...



Excel



Forms



OneNote



PDF



Planner



Power BI



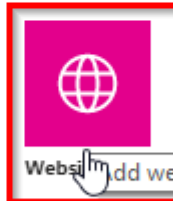
PowerPoint



SharePoint



Stream



Website Add websites you need to get to in a



All Tabs



Trello



Flow



Polly



Freehand b...



Jira Cloud



PowerApps



Asana

6. Provide a name for the website, enter the wiki URL copied in previous step and click on **Save**. It appears on the channel where all of the team members can access to get quick information if there were any updates done



Website

[About](#)

Tab name

Tailwind Traders Project Wiki



URL*

[https://dev.azure.com/\[redacted\]/Tailwind%20Traders/_wiki/wikis/Tailwind%20Traders%20Project%20Wiki](https://dev.azure.com/[redacted]/Tailwind%20Traders/_wiki/wikis/Tailwind%20Traders%20Project%20Wiki)



*Make sure you're only linking to sites that start with 'https://' and contain trustworthy web content. That way, you and your team can stay secure.

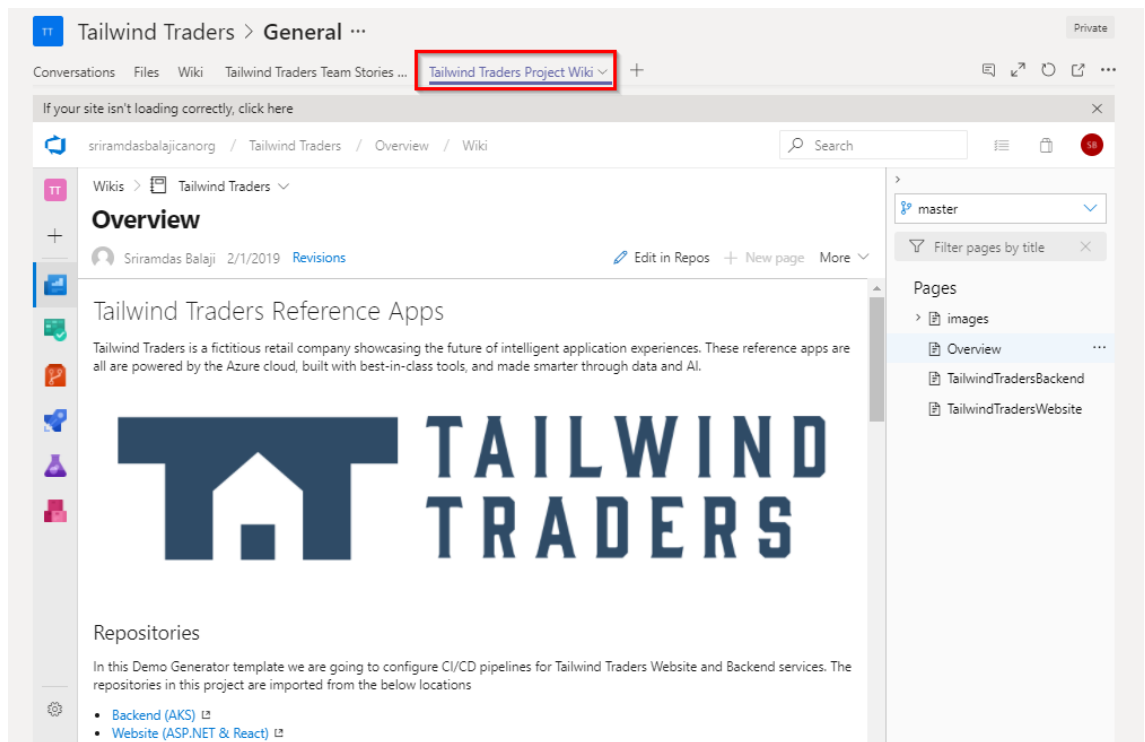


Post to the channel about this tab

Back

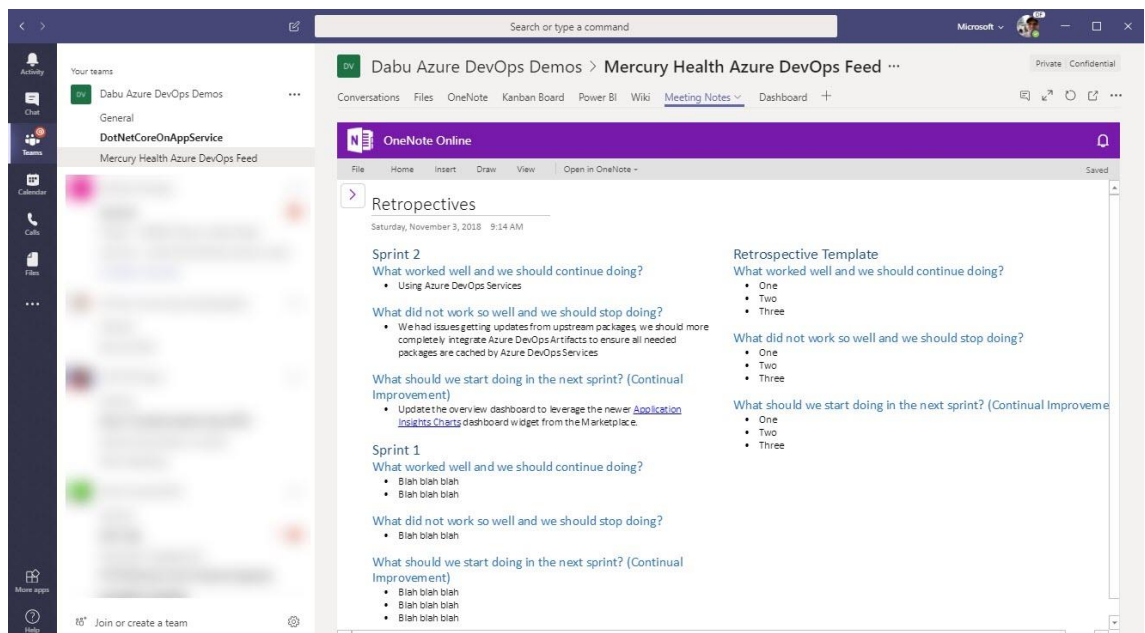
Save

7. This is how the website/Wiki looks when added to the channel.



Now that you have connected Microsoft Teams and Azure DevOps think about the other development team information that you can expose via Microsoft teams, for example:

- **Add a OneNote notebook to Teams** to keep meeting notes such as **Sprint Planning Meetings** and **Retrospective Meetings**.



- **Connect Azure DevOps to Power BI** and **add a Power BI tab** that displays advanced reports from Azure DevOps or other data related to your project.

